

CLAIMS

1. An automatic programming method for selecting
workpiece data from a workpiece database in which a
material, a shape, and a dimension of a workpiece are
5 registered, creating a workpiece model based on the
selected workpiece data, and creating a program for
controlling a numerical control device by using the created
workpiece model, the automatic programming method
comprising:
 - 10 selecting minimum workpiece data that includes a
product shape from the workpiece database, by comparing
dimension data of the workpiece data registered in the
workpiece database with dimension data of a product model;
and
 - 15 creating a workpiece model based on the selected
workpiece data.
2. The automatic programming method according to claim 1,
wherein
 - 20 the selecting includes
 - selecting workpiece data with a smallest diameter
including the product shape from the workpiece database,
and
 - selecting, when there is a plurality of workpiece
25 data having the smallest diameter involving the product
shape, workpiece data with a shortest length equal to or
longer than a length of the product shape.
3. The automatic programming method according to claim 1,
30 wherein
 - the selecting includes
 - displaying workpiece data registered in the
workpiece database in a list, and

displaying minimum workpiece data selected from the displayed workpiece data in a highlighted manner.

4. The automatic programming method according to claim 1,
5 wherein

the selecting includes

displaying workpiece data that includes a product shape from the workpiece database in order from workpiece data having a least cutting amount in a list, and

10 displaying minimum workpiece data from among the displayed workpiece data in a highlighted manner.

5. A program that causes a computer to execute the method according to any one of claims 1 to 4.

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6. An automatic programming apparatus that selects workpiece data from a workpiece database in which a material, a shape, and a dimension of a workpiece are registered, creates a workpiece model based on the selected
20 workpiece data, and creates a program for controlling a numerical control device by using the created workpiece model, automatic programming apparatus comprising:

a workpiece selecting unit that selects minimum workpiece data that includes a product shape from the
25 workpiece database, by comparing dimension data of the workpiece data registered in the workpiece database with dimension data of a product model; and

a workpiece-model creating unit that creates a workpiece model based on the selected workpiece data.

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7. The automatic programming apparatus according to claim 6, wherein

the workpiece selection unit selects workpiece data

with a smallest diameter including the product shape from the workpiece database, and when there is a plurality of workpiece data having the smallest diameter involving the product shape, workpiece data with a shortest length equal
5 to or longer than a length of the product shape.

8. The automatic programming apparatus according to claim 6, wherein

the workpiece selection unit displays workpiece data
10 registered in the workpiece database in a list, and displays minimum workpiece data selected from the displayed workpiece data in a highlighted manner.

9. The automatic programming apparatus according to claim
15 6, wherein

the workpiece selection unit displays workpiece data that includes a product shape from the workpiece database in order from workpiece data having a least cutting amount in a list, and displays minimum workpiece data from among
20 the displayed workpiece data in a highlighted manner.